

CLAIMS

1. A recombinant Sendai virus containing a genome having a desired foreign gene inserted, or a desired gene deleted or inactivated,
5 but retaining the disseminative capability.
2. The recombinant Sendai virus of Claim 1 in which one or more than one gene encoding functional proteins are altered.
- 10 3. The recombinant Sendai virus of Claims 1 or 2 comprising a foreign gene capable of being expressed in hosts.
4. An RNA molecule comprising RNA contained in the recombinant Sendai virus of any one of Claims 1-3.
- 15 5. An RNA molecule comprising cRNAs of RNAs contained in the recombinant Sendai virus of any one of Claims 1-3.
6. A kit comprising
 - 20 a. a DNA molecule containing a template cDNA capable of transcribing RNA of Claims 4 or 5, and
 - b. a unit capable of transcribing said RNA of Claims 4 or 5 with said DNA as template *in vitro* or intracellularly.
- 25 7. A kit comprising
 - a. a host expressing the NP, P/C and L proteins of Sendai virus (each protein may be replaced with a protein of an equivalent activity), and
 - b. the RNA molecule of Claims 4 or 5.
- 30 8. A method for producing the recombinant Sendai virus of any one of Claims 1-3, comprising transfecting RNA of Claims 4 or 5 to a host expressing the NP, P/C and L proteins of Sendai virus (each protein may be replaced with a protein of an equivalent activity).
- 35 9. A kit consisting of the following three components,

- a. a host expressing the NP, P/C and L proteins of Sendai virus,
- b. a DNA molecule containing a template cDNA capable of transcribing RNA or cRNA of any one of Claims 4 or 5, and
- c. a unit capable of transcribing RNA of Claims 4 or 5 with said DNA as template in vitro or intracellularly.

10. A method for producing the recombinant Sendai virus of any one of Claims 1-3, wherein said method comprises introducing a DNA molecule containing a template cDNA capable of transcribing RNA of Claims 4 or 5, and a unit capable of transcribing RNA of Claims 4 or 5 with said DNA as template in vitro or intracellularly into a host expressing the NP, P/C and L proteins of Sendai virus.

11. A method for producing a foreign protein, comprising a process of infecting a host with the recombinant Sendai virus of Claim 3, and recovering expressed foreign proteins.

12. A culture medium or chorio-allantoic fluid containing the expressed foreign proteins obtainable by transfecting the recombinant Sendai virus of Claim 3 to a host, and recovering said culture medium or chorio-allantoic fluid.

13. A DNA molecule for expressing a protein encoded by a foreign gene integrated into a Sendai virus vector comprising said foreign gene inserted downstream of a promoter in an (antisense) orientation for the transcription of antisense RNA encoding said protein and said promoter.